

# [METHOD FOR FAIR SHARING LIMITED RESOURCES BETWEEN MULTIPLE CUSTOMERS]

## Abstract

The invention disclosed comprises a method for encouraging fair sharing of limited material inventory and capacity between multiple customers when creating a production plan. The invention allocates resources among competing demands in a linear programming production planning system by first classifying the demands into fair share sets, wherein all demands within each set have the same priority, calculating the cumulative demand for each resource within each set, and then allocating the resources to the demands in order of fair share set priority. If, during the allocating process, the supply of a given resource cannot satisfy a given cumulative demand of a given set, the given resource is allocated proportionally (e.g., evenly or according to usage proportions) among all demands that contribute to the given cumulative demand within the given set. This is an advanced planning system for optimizing established planning objectives (e.g., customer service, short lead times, low inventory, and prioritized allocation

of supply and capacity) to compute a feasible production plan for the enterprise.